

REMARKS/ARGUMENTS

In response to the Office Action mailed August 28, 2007¹⁰, 2007, Applicants amend their application and request reconsideration. In this Amendment claims 1-9, 11, and 15 are newly cancelled and claims 20-28 are added so that claims 20-28 are now pending.

Each of the claims presented in this Amendment is a new claim, but correlates with a previously pending claim. It is not represented that any of the new claims exactly reproduces a previously pending claim and the Examiner is encouraged to compare each of the new claims with the formerly pending claims. For the Examiner's convenience, the general correlation between the formerly pending claims and the new claims is as follows. New claims 20-28 respectively correspond to former claims 2, 9, 11, 3, 4, 5, 6, 7, and 15.

In the previous Office Action it was indicated that claims 3-6 and 15 would be allowed if rewritten in independent form. On that basis, the inventors assert that claims 23-26 and 28 should be immediately allowed since each of those claims is an independent claim that correlates with one of claims 3-6 and 15.

No claim now pending corresponds to examined claims 1 and 8 that were previously pending and were rejected over prior art. Therefore, there is no response to the rejections of claims 1 and 8. With respect to the other pending claims that were rejected over art, and for which correlated claims are now pending, the prior art rejections were as follows.

Claims 2, 7, 9, and 11, were rejected as anticipated by Mutoh et al. (U.S. Patent 5,023,538, hereinafter Mutoh '538). Claim 2 was also rejected as anticipated by Mutoh et al. (U.S. Patent 5,053,690, hereinafter Mutoh '690). Claim 11 was rejected as anticipated by Ishida et al. (Published U.S. Patent Application 2002/0093391, hereinafter Ishida). Finally, claim 11 was rejected as anticipated by Maeda (U.S.

Patent 7,173,393, hereinafter Macda). These rejections are respectfully traversed with respect to the claims now presented.

The rejections of claim 2, if applicable at all, apply to independent claim 20 as presented here. Of course, for either of Mutoh '538 or Mutoh '690 to anticipate new claim 20, those patents would have to disclose every element of that claim. The inventors submit that both applied Mutoh patents fail to meet that stringent test.

With respect to new claim 20, Mutoh '538 fails to describe the voltage vector adjusting unit of claim 20, a unit that adjusts the duration of output of voltage vectors as described in the second full paragraph of that claim, including its two sub-paragraphs. Based upon a test of the total duration of output of the zero-voltage vectors in the control cycle, the voltage-vector adjusting unit either adjusts the duration of the zero-voltage vectors to at least a fixed time or to zero, depending upon which test result is fulfilled.

In asserting that Mutoh '538 discloses a similar limitation in former claim 2, the Examiner relied upon Figures 8 and 6C of Mutoh '538 along with the description in columns 12-15 of Mutoh '538, which relates to the cited figures. However, these figures and the cited passage do not meet the description of new claim 20. Rather, Mutoh '538 merely states that if the result of a decision made in its step 108 is "yes", then the hold time T_0 of the zero-voltage vector is calculated. Consulting that calculation, it is apparent that Mutoh '538 does not disclose changing the duration of outputting of the zero-voltage vectors to zero if the total duration is shorter than a predetermined time as described in claim 20. It follows, from the failure of Mutoh '538 to anticipate new claim 20, that Mutoh '538 cannot anticipate new claims 21 and 22, each of which depends from 20, and are correlated with examined claims 9 and 11.

Likewise, new claim 20 cannot be anticipated by Mutoh '690. In citing that patent, the Examiner relied upon its Figures 7B and 6B. These figures describe a change in time, ΔT , and that there is a time T_0 that is set equal to zero. However, Mutoh '690, like Mutoh '538, fails to describe changing the durations of outputting of zero-voltage vectors as determined by the voltage-vector adjusting unit of claim 20.

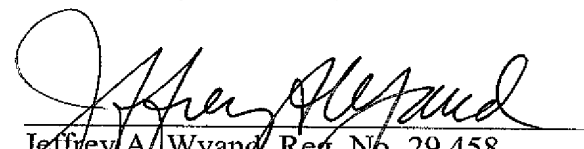
Thus, for the same reasons that Mutoh '538 cannot anticipate claim 20, Mutoh '690 cannot anticipate that claim.

Examined claim 7, generally corresponding to newly submitted claim 27, was likewise rejected as anticipated by Mutoh '538. However, Mutoh '538 fails to disclose the voltage-vector adjusting unit having the functions as described in new claim 27. That is, particularly with respect to the second sub-paragraph of claim 27, describing operation of the voltage-vector adjusting unit, Mutoh '538 fails to describe changing total duration of the zero-voltage vectors to either of two durations, depending upon whether the total is longer or shorter than a predetermined time. Accordingly, the rejection should now be withdrawn.

Finally, the rejections of examined claim 11 based upon Ishida and Maeda are moot. Claim 22 has a general correspondence to examined claim 11. Claim 22 depends from new claim 20. It was not asserted that claim 2, to which new claim 20 generally corresponds, was anticipated by either of Ishida or Maeda. For that reason, no claim depending from new claim 20 can be anticipated by either of those two publications. Therefore, it is not necessary to supply further comments with respect to the rejection of claim 11 as to new claim 22.

Reconsideration and allowance of claims 20-28 are earnestly solicited.

Respectfully submitted,


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